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No. 12

Feb.

Passed March 1825

Bilious Fever

James Hay

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An
Inaugural Essay
Upon
Bilious Fever
presented to the Faculty of Medicine
for the
Degree of Doctor of Medicine
By
James Hay of
Virginia

Passed.

James Hay of Virginia

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Introductory Remarks

The difficulty of acquiring medical knowledge through the medium of books has been acknowledged by the experienced Physician, and is but too painfully felt by the Student; he searches the records of medical science in vain for certain and indisputable precept, for determined and positive truth; doubt and uncertainty follow him in every step, contradictory theories and conflicting statements arrest him in every page he peruses, and after the most laborious research he is almost constrained to acknowledge, that the profession he has embraced, is indeed what its enemies have termed it "the science of conjecture"!

Much of the uncertainty of which I complain, is no doubt attributable to the intrinsic difficulty of the subject; It has even been asserted that we can never expect a perfect system of medicine; be that as it may, we cannot offer that supposition as an apology for its present imperfection which can, but too palpably, be traced to other causes.

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time, to take such an Historical view of the subject, as would enable me to point out what these causes are, that have thus retarded the progress of medical science. In reference, however, to the particular subject which I propose to consider in the ensuing essay; I will mention some which, in my estimation, have had considerable influence to that end. ——— It strikes me that, among the most prominent, may be placed, an undue regard to ancient authority.

During the early ages, superstition and credulity were the prolific parents of many errors in every department of human knowledge, but in none more so than in medicine; 'tis then we hear of amulets and charms, the conjunction of planets, and of sidereal influence; 'tis then that deluded patients gulped down remedies almost too disgusting to be named, and believed them specifics, and when, in reference to that time, Lord Bacon declared "That witches and impostors have always held a competition with Physicians", he only

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only perpetuates a fact that stands in humiliating opposition to the proud boast that our art is of "divine origin". If the remark of the satirist was authorized by fact (as there can be little doubt) is it to the writings of that age, that we are yet to look for medical information? — my allusion is not only to the Greek and Roman writers, but to those bloated compilers and hypothetical essayists who sprung up after the revival of literature in Europe, & whose theories ought, ere this, to have descended to the "tomb of all the Capulets" — or if remembered, remembered only to be ridiculed. It is, no doubt true, that the Greek writers discribed diseases that occurred at their time, with the greatest accuracy, and that in fact, even to this day, their histories of many of the maladies that afflict mankind, are yet correct, but have not these histories (as far as they are perfect) been embodied in modern medical literature? and if so, why should we seek for "truth in a well" when it is brought to our hands — why should the student pore over huge tomes of ridiculous

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and obsolete speculations merely because he may find in the dark mass, some insulated truths, which like the scattered barks of the seas, only tend to shew the vast abyss in which they float.

"Apparent rari nantes in gurgite vasto"

Yet the works of this age have been but too frequently the source from which the pursuer of medical science obtains his first impressions (impressions we are told always strong) ~~and~~ he carries them with him in all his after inquiries. Having drawn them from a polluted source, they unquestionably contaminate his views with error.

The chymist will tell you that the stagnant and green pool contains as pure water as the fountain, yet the blockhead that drinks it will find to his cost, that in getting the water, he has gulped down with it, all its impurities.

If it is contended that he who is unable to discriminate between the truth and falsehood the writers to whom I allude, can have no agency, either in.

retarding or advancing medical science, that his imbecility of his mind, will keep him in obscurity, it may be so as a particular proposition; but I feel well assured that as the chymist, with all his art, cannot extract, from the green pool, water without taint, so even the philosophic mind will seldom be free from the prejudices of early associations.

Another cause that has proved most unfortunate for medicine is, that those who have constructed systems, "have never been contented in advancing so far as they were conducted by observation" but seduced by visionary theories, they have, upon the basis of a few insulated facts, piled hypotheses upon hypotheses, till the monstrous fabrics of their fancies, have fallen from their own rottenness. Thus have the great names of an Hippocrates, a Boerhaave & a Cullen, been perpetuated more as much by the injuries they have done to medicine, as the benefits they have conferred. In reference to the practice of my own country I think

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I am justified in saying, that the footsteps of the Physician, that would regulate his practice in fever, by either of the systems to which I have alluded, would be traced by misery and death.[A]

To these prominent causes, I may add another which has been equally subversive of true reasoning in medicine; I mean — the application of the laws of other sciences to the explanation of the phenomena of life.

Physiology, however, is no longer a science of speculation, and the visionary fabrics of the old physiologists, those "fantastic works of fancy", filled with words of no meaning, are fast fading, before the truths of modern experimentalists —— and it requires no great stretch of the imagination to anticipate the time (and that not far distant) when physiology shall be supported by principles, as undeniable as those which elucidate the physical sciences; —— it must however be conceded, that the absurdities, which have disgraced Physiology, have had no inconsiderable influence in retarding,

A. If the severity of the above remarks require an apology = I beg leave to state = that I refer solely to Their theories, & the Brain

retarding the progress of medicine.

The causes I have enumerated have a general bearing, but I have now to mention one which seems peculiar to, or, at least, to my own country — viz — that the American diseased seeks in information (in the brain) from English books. It is in vain to assert that specious theory or lesson the same as American writers will not be conceded. If their general views are correct, that the vaccine recommended, then it is the is weak and defective.

Nothing, however, has so much an influence upon the public as the mere confidence in the physician. I should not indeed have ventured upon the delicate subject of the neglect of the agricultural class

[illegible]

[illegible] evidence of the [illegible] occurrence might be referred as an [illegible] on the imperfection of the remarks of our [illegible] in [illegible].

If the systems of European writers are thus incorrect, if their theories do not explain the phenomena of fevers in our climate, and their practice is totally inefficient from what source are we to gain information? —

When our great and growing nation declared itself free — we severed not only the shackles of political but of literary bondage; no longer trammelled by authority from which it might be thought inherent heresy to deviate, the writings of our Physicians, bore on their face, the impress of originality the spirit of enquiry thus commenced still exists & happily for us a name is not yet so consecrated but that the doctrines sanctioned by its signature may be combatted without the imputation of irreverence —

"Marcy, the great merits of Cullen & Brown to whom I have alluded [illegible]

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"Marcus dix ?? Ita est" ——— is not yet the motto of American Physicians: hence I may safely say that the Physiology of medicine is cultivated in this country with more liberal views than in Europe, and I am well convinced, in no part of this country, with more zeal and more ability than by the professors of my own "Alma Mater."

To another source the american student may look without disappointment for knowledge; I mean to the writings of the British army and navy surgeons, who, during a long and destructive war, were led by their duty, to witness the acute forms which fever assumes under a tropical sun. They soon found it necessary to forget, in their practice, the prejudices which their education in the humoral, spasmodic, and Brunonian schools had engendered, & resort to means, which the real disciples of "debility and plethora" would have shudered to employ ——— They found it from sad experience, to be, a thriftless war to "combat a giant with a straw" and such is the estimation

with

with which I regard their testimony, that I am free to acknowledge, that the first clear view that I had upon the subject of fever, was drawn from the writings of one of them B, after having spent many anxious hours in perusing the pages of a Cullen, a Rush & a Wilson C.

But after all the difficulties are only lessened, convinced, however, of the vast importance of some positive principles, as a guide to practice in fever; — I shall attempt, to point out the causes, phenomena, and treatment of that species of fever so frequently the autumnal scourge of my native state — and which it is most probable will hereafter cost me many moments of anxious solicitude, in prosecuting the arduous duties of my profession.

May I be permitted to offer to my instructors the causes mentioned in the preceding remarks, as an apology for the errors of those that are to follow; remarks — which unaccustomed as I am to composition — I should never have attempted but

B Johnson on tropical climates.
C. I regret exceedingly not being able to procure Professor Chapman's book on fever.

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but in compliance with an institution of the University — like Shakespeare's redoubtable knight I find myself "compelled to give my reasons", but unfortunately the parallel holds no farther; like him I have not reasons "as plenty as blackberries", but such as I have got, I trust will be received with that forbearance & charity which they will stand so much in need of.

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work of the sort is much wanted. I to no one is the task better fitted than to Dr. Chapman.

Bilious Remittent Fever

This form of fever is endemical to warm climates and its usual type — to use the language of the schools, is a Synochus; but as I am inclined to believe, that the typhoid depression which but too frequently occurs is rather attributable to extrinsic causes, than to the absolute nature of the fever; and as names have never been much influential in practice, I am induced to object to this fever being considered a synochus, for the practitioner will have derived from the same source — that gave him the name, the caution, "that "we must always remember, in moderating reaction in "the first stage of synochus that we do not carry our "depletory methods too far, for fear of the debility "that necessarily occurs in the second stage": now as I believe that in most instances this debility is the consequence of unsubdued reaction, & that to prevent it, we have only to moderate excitement in the first stage, I would rather call our Bilious fever a

Synocha

Synocha — the name thus being an index in a great measure to the practice; — for I most devoutly believe that the mortality attendant upon this or that type of fever is to be traced to a dread of that bugbear debility the bastard bantling of European systems, where we shall find, plans for the treatment of fevers on climate laid down with as much precision as if the writers had themselves panted under the influence of a tropical sun — & what is most extraordinary, the very indications they draw, are the deductions of theories formed upon the phenomena of fevers as they exhibit themselves — in their cold & humid climates upon the edges of a Lincolnshire fen or a Dutch canal.

Causes

For the sake of perspicuity, I shall divide the remote causes of bilious fever into predisponent and exciting, although the predisponent frequently becomes the exciting cause & vice versa — among the most prominent

predisposing

predisposing causes are solar influence or heat & cold intemperance, the depressing passions, and all those agents which tend to reduce the system below the standard of health. The great exciting cause is marsh Miasma —— The proximate cause of fever has been a subject of enquiry from the earliest time. By the proximate cause, is meant those minute organic alterations which produce the phenomena of fever we may safely say it has been a fruitless enquiry = but if it has reference to derangement of function or structure, which are apparent by external symptom The experience of ages has enabled us to draw pretty accurate pathological conclusions.

Like the fabled hydra of antiquity fever rears its many monstrous heads; how incapable then any general proximate cause must be to elucidate the phenomena it displays in its diversified forms, we are conceded, when we reflect — that the systems of a Stahl a Hoffman a Boerhaave a Cullen & Brown

a

a Darwin & Rush & a Wilson, have all been tried and found wanting. They have indeed, attempted to do what in the nature of things was impossible to be done — We are told of Boerhaave that he collected from authors all the symptoms they enumerated, of fever, and rejecting such as were not present in all fevers = he was astonished to find that they resolved themselves into the three following only = viz. shivering, frequent pulse, and heat. now it is well established that even these do not occur in all fevers, & in fact, that there exists not one symptom of fever universally present[x] — If then there exists no pathognomonic sign of fever. how can a general proximate cause be devised?

There does exist however certain indisputable truths = which have been established by the experiments of modern Physiologists, which throw much light upon the operations of the animal economy, and by which we are not only able to explain the phenomena of the

Human

x Forsyth, 1st dissertation.

human machine during health — but also the effects of morbid agents during disease. These truths I shall enlist to support my views, and by them endeavour to point out the effects of the predisponent and exciting causes & thus pave the way to clear indications of cure.

Among the predisponent causes of bilious remittent fever — I have placed solar influence at the head of the list. I may indeed say — that all the others are only accessory — & without it would be unavailing — while it alone may both predispose & excite —

The effects of long continued heat is to produce debility in all the animal and vital functions, but it expends its most baneful influence upon the biliary secretion. — The law of sympathetic action & consent of parts, by which the Physiologyst explains many of nature's phenomena, must at the present day be conceded, as an undeniable principle, though we cannot say what this sympathy is; we only know it

it from its effects, and can no more explain its nature than the Chemist can affinity — the Geometrician, gravity or the mechanic elasticity. It is a law of nature, our learning, and like many of her works far beyond our feeble scrutiny — It has been reserved for Dr. J. Johnson* the elegant author of a work on tropical climates, to make a particular application of this law in solving the nature of the biliary derangements of warm climates. he shews the existance of a strong sympathy between the skin & liver = which he has called "Cutaneo Hepatic sympathy" and which in my estimation very satisfactorily accounts, for many of the Hepatic affections incident to long application of heat. Another sympathy not less important exists between the skin and alimentary canal.

The primary effect of heat is a stimulus to all the secreting organs — its direct impression is upon the skin, and sympathetically upon the glandular system & chylopoietic viscera; now the effect of stimuli

*. The edition of Dr. Johnson's book that I have, is the one edited by Professors Chapman & Physick. I entered upon the perusal of the work with the conviction that it must prove uncommon merit to merit the sanction of their name, and can only say that in the whole course of my medical studies I have never read a book which has given me such unmitigated satisfaction.

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in excess, is to produce debility, and it will be found that after a long application of heat, the secretory organs, reduced to a state of indirect debility, either have their functions paralized or yield vitiated fluids, in the place of their healthy and natural secretions. and none are so liable to this vitiation as the bile.* — The stomach too the great centre of both healthy and morbid associations, will fail under the debilitating agency of heat and anorexia, sour eructations, flatulence, and all the evidences of depraved gastric secretion, will evidence its derangement. The bowels also cease the faithful discharge of their healthy function, and constipation or dysenteric looseness ensue. In this state of body will most persons find themselves even though (in temperate habits) during the Autumnal months in Virginia. and nothing but an exposure to the exciting cause is wanting to produce Bilious Fever.

It would be worse than useless to use any arguments to prove the debilitating effects of intemperance

Cuba

* as known in tropical climates.

upon the system generally, for it is apparent to the most superficial observer: it may, however, be proper to remark, what I believe is well established by experience that while the frame universally suffers from debauchery, the liver is the organ, which is peculiarly affected in drunkards; yes— it will at once be perceived how pale an adjunct to the disorganizing influence of great atmospheric heat, must be intemperence, in predisposing to the Bilious endemic. I am aware that a specious apology for "free libation", has been urged upon the score of experience— they will tell you that they daily witness many persons arriving to great old age after a life of much indulgence; and I must acknowledge that it has come within the sphere of my own observation to know three men, who lived and died upon the banks of the Chickahomony swamp one of the most unhealthy parts of Virginia, who lengthened out their pilgrimage to the uncommon term of nearly a century, the oldest of whom for the last forty years of his life, never

Drepes

prepared his couch at night "like in the mantling bowl all cares were drowned". The next oldest was emphatically a "bon vivant" and the last never forgot, during the course of his long life the old Virginian habit of his antifogmatic. But these examples no more prove the innocency of intemperate habits, than the fact of the Spanish juggler of Paris licking hot iron, proves that fire might be applied to the animal fibre with impunity. The sensibility of men differs in degree & the stimulus under which one would sink would but exhilerate another = if Physicians have used this fact to point out the proper use of ardent spirits, they had done more good = than by the unqualified, disapprobation they have generally expressed of its use at all.

Dr. Rush, always pleasing in his writings, not unfrequently permits his imagination to lead him into the wildest speculations; in speaking of the effects of temperence on the mind, he relates an anecdote of Carneades, a noted Philosopher of Greece, who not only

abstained

abstained from food and drink, but absolutely increased the effects of inanition by taking a purge of hellebore before he disputed with Chrysippus, a distinguished Philosopher of the sect of stoics. He also dates upon this and other facts until he is led to the conclusion that the sagacity usually displayed by the Scotch is attributable to their barley broth. I question whether there exists in the world a set of more ingenious glutton, than compose the literary galaxy at this time in the capital of Scotland — If we are to credit the accounts of travellers, the "L'art de gourmand", is there a science, and while we might suppose, the philosopher engaged in his deep and recondite pursuits — the Poet with "eye with fine frenzy rolling giving to airy nothing a local habitation and a name" or the pious divine pondering over huge tomes of polemical divinity to draw from the well, drink for the thirsty souls of his needy flock, they are in fact, seated round a well furnished table at "Emans' the prince of publicans" Chrysippus

to see Peter's letters to his kins folk.

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disputing the knotty point, whether punch is better made of lemon or lime juice = the truth is (as I before observed) it depends much upon the original temperament of the man, for if we are told that Newton lived upon vegitables & drank water when he composed his book on optics; we all know that the great William Pitt took good care that his body should not suffer while his gigantic mind wielded the destinies of a world. but let it not be supposed that I am an apologist for intemperance "that bane of morals and of health" = my object is merely to propose the question = how far the use of distilled spirits, is consistent with health & temperance; in answer to which I say = if we find its use attended by lonic & coherent effects its is not only innocent but advantageous; = if to the contrary, momentary excitement is followed by lassitude = you may conclude, either that too much has been taken or that it is altogether improper & if in the smallest quantity it —

Produces

debilitating effects - look upon it as Nature's cordial that you drink not at all. In conclusion - Intemperence next to solar heat is the most powerful, predisponent cause of Bilious Fever.

The tendency of Inanition, poverty the depressing passions &c. to debilitate is sufficiently apparent, without farther remark. — There is one cause which can scarcely be called either predisponent or exciting - but rather the means by which the ~~predisposed~~ exciting cause is sometimes enabled to act, early rising. — That early rising should be inimical to health - is a paradoxical assertion for which I am bound to give my reason. No one who has lived in our warm climate, but has witnessed the dense fogs of our autumnal months; these fogs, the products of the preceding days exhalation returned to the earth by the coldness of the evening and night, begin to rise at the approach of day charged with noxious miasma, that inexhaustible and terrific source of fever. He then that keeps within doors, until the sun has dissipated the fog, certainly

escapes

stands a much better chance of escaping the febrific poison than he who exposes himself to its influence by early rising. The more labor in the house in the morning would prove a better prophylactic than ale the antizymotics that were ever pulped down in Hipinia. Having thus shewn how the predisposing causes render the system liable to fever: I, in the next place, proceed to make some remarks on the exciting cause

Marsh Miasma

This subtle poison, the frightful parent of more diseases than sprung from the fabled box of Pandora, is perfectly incognizable to the senses, and is only known by its dreadful effects. The Chymist in vain attempts to detect its presence. The highest exertion of his noble art resolves the atmosphere, loaded with its particles and the elastic air of the mountain, into the same constituent principles. Whether during the putrescent decomposition of vegetable and animal substances, one noxious gas is developed, the single parent of the whole

family

family of fevers, or whether different specific contagions are produced = has given rise to much angry dispute in this country. ——— The who reader attention by the accounts of the endemic fevers of warm latitudes will probably assent to the first proposition; he will find in common cases abundant, in some cases, the appearances of yellow fever. and during the prevalence of the last, cases of common intermittent, as the patient is either, from debility and previous derangement, prone to the worst form, or by his general good health only liable to the other; and this opinion may be supported by the following (at least) plausible argument.

If as we are informed by Chymists, that an additional specific gravity so small as not to be distinguished but by the nicest test, will produce such a difference in the properties of the hydrocyanic acid, as to make the same dose in one instance a dead ly poison and in the other a safe medicine. why may not the great chymical laboratory of nature, so altera

by concentration or diffusion, the same morbid cause as to produce in the first place yellow and in the next bilious or intermittent fever? again, apply a plate of heated iron so far from the skin that only slight pain and partial intumescence ensuevent, apply the same plate directly to the skin, how different will be the consequence, the cause evidently the same. It is my decided opinion therefore, that although the characteristic phenomena of the fever are different, it does not necessarily follow that there should exist specific differences in the exciting causes.

After all, it matters not in a practical point of view whether one or many specific causes produce the varieties mentioned. The treatment will necessarily be as different as the symptoms. It shall now be my endeavour to point out what those symptoms are which aggregate constitute bilious intermittent as it commonly occurs.

Symptoms of Bilious ~~Intermittent~~ Remittent Fever.

After an exposure to the exciting cause, it commonly happens that some premonitory signs warn the patient of approaching sickness, such as nausea in the morning yellow & furred tongue, slight shiverings alternates with flushes of heat, wandering pains, lassitude and giddiness. If timely precautions are now taken a regular attack of fever may be warded off, but unfortunately most persons either from an aversion to medicine or under the vain hope that their slight uneasiness may pass by, use no remedy, and on the second or third day they are seized with a regular bilious fever. These premonitory signs are, however, not always present, and the attack supervenes upon the immediate application of the exciting cause.

The fever is ushered in by a cold stage, generally of short continuance & seldom amounting to rigor: or as sometimes happens the hot stage commences the attack; the patient now complains of great

pain in the back = and nausea = probably from the first accompanied by bilious vomiting, the pulse beats strong hard, & quick; the surface is dry and hot. the urine scanty and red coloured the bowels costive. the tongue covered with white fur, while pain in the head especially over the eys, is but a prelude to the suffering, that the next exacerbation brings, with it. a slight remission having occured on the morning after the attack. the progress of the next day is characterized by an aggravation of every symptom.

An oppression about the precordia is now complained of, accompanied by great restlessness and anxiety, the skin becomes exceedingly hot. the bowels remain obstinately costive or dysenteric irritation distresses the patient. the mouth is dry and parched; the patient suffers with thirst, which he can in few instances quench, without producing great nausea probably vomiting, as the mildest fluid taken into the stomach offends it. between

12 and 8 o'clock P.M. The fever has reached its acme, the pulse at the wrist, now beats, quick, strong, hard, and bounding, while the patient in the excruciating agony that he suffers in his head will tell you, that at every throb, it appears to be raised from the pillow in severe cases delirium supervenes, the vessels of the eye become turgid, and an intolerance of light evidences the patients great distress. If delirium has not occurred you will find the patient very desponding. He is convinced, that his sickness is fatal, and it will require all the skill of the Physician, all the kindness & attention of his friends, to calm and compose his mind. This last symptom is an universal concomitant of every severe hepatic affection.

Should the remedies used fail to arrest the progress of the fever - this state of things cannot long continue, and after alternate remission and exacerbation - the remissions frequently so slight as scarcely to be perceived - about the 5th 7th or 9th day the patient, worn out

by

by violent reaction, sinks into a state of alarming debility — again the powers of life renew the struggle and on the day subsequent to the change, the increased volume and tension of the pulse are but the last evidences of a power soon to be extinguished. The fever now reigns triumphant. delirium changes to stupor, the pulse flutters and becomes exceedingly rapid. the surface is still far above the natural standard, the gestures of the patient point out the distress about the region of the stomach & liver. the bowels are still obstinately costive or if discharges occur they are, black, green, and extremely fœtid. the tongue is covered with a brown & thick crust. and in very bad cases the skin now becomes yellow, the conjunctiva of the eye is tinged of the same saffron hue and a cadaverous smell is exhaled from the body

If amendment does not occur in a short period — we can only expect, those symptoms, the immediate precursors, of almost certain dissolution subsequent

Convulsions

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tendinous & general twitching of the muscles prove that the function of the brain now yields, the stomach convulsively ejects its black and grumous contents, involuntary alvine discharges of a fetid nature occur — the capillary vessels burst, lost their energy — yield their contents, and vibices & petechiæ, purple a skin already yellow with absorbed and vitiated bile — cold — clammy — and partial sweat bedews the forehead, the eyes grow dim, and in a convulsive struggle death claims its miserable victim.

Happily, the case I have exhibited is an extreme one — In our country practice, under proper remedies we shall find the fever on the 5th, 7th or 9th day remit its violence; and the remissions increasing in length, it may terminate in an intermittent. Or the change from the first to the second stage may not be accompanied by an aggravation of bad symptoms & the Physician will in that case have only to contend with simple debility,

such

such, indeed, is generally the case, in the country, but even under the foot of our mountains, we sometimes see Bilious & remittents of same the most malignant forms! P.

It will be found by a review of the symptoms that the fever is, in its first stage, vorsently inflammatory with topical determination to the liver and head – and in proportion to the morbid excitement in the first – so will be the depression in the second stage. The indications of cure then are plain to moderate excitement & relieve topical affection in the 1st and support excitement in the 2d stage.

In the short limits of an inaugural essay, I hope it will not be expected of my hand, to enter into a minute investigation, of the multifarious remedies, that are calculated to fulfil either the one or the other indication, and in declining to do so, an ignorance of the antiphlogistic

or.

P. In my own neighbourhood about 3 years back a man died of bilious fever. Just at the foot of the Blue Ridge – exhibiting such symptoms, as would

a stimulating plan as laid down by authors will not, I trust, be imputed to me.

I shall therefore confine myself to a few remarks upon some of the most prominent remedies, and conclude this part of my subject by a general summary of such practice as I would institute if called upon to prescribe for a Dale out labouring under such a fever as I have described; for the Epidemic varieties of fever, are so numerous = that a volume would scarcely suffice to enumerate their anomalous conditions, it is therefore to be understood that my remarks apply only to pure typhus fever, in all its phases thus as

Blood Letting

There is no remedy upon the use of which, more caution has been given, and more dread expressed than the use of the lancet in fever of any kind by European writers; and more especially, when they pretend to lay down rules for practice in our climate ——

"Venus

"bonus medicus nunquam sanguinis humani "prodigus," ——— is an aphorism of Forbes's which has been supported by those whose nits have been clouded by a dread of that debility so often inculcated by Cullen and Brown; taking it for granted that debility (and that too of low grade) must necessarily follow the excitement at the commencement of fever, a pupil[a] of the above school has even asserted "that we must only moderate excitement by cleansing the prima viæ = until by this suspicions & the heat the fever as such". What shall we think of such a doctrine? They say, indeed, what is in fact true; that fevers in hot climates terminate more rapidly than in cold = and that debility sooner supervenes = but if the debility is in consequence of violent reaction in most fevers, (and I am satisfied it is the case in this) and is not to be considered as a positive feature of the disease; the practitioner will perceive how ——

Impossibility

[a] Wilson on fever

imperatively, every means calculated to reduce reaction is demanded at the very onset of the complaint and none answers that purpose so well as blood-letting. It not only relieves the head from the great determination to it, which always, without exception occurs in this fever but by relieving the congestion of the portal circle, exerts its most beneficial influence upon the very organ most affected — I am willing however to concede that it is a remedy that must be used with discretion and at a proper time. The time is evidently during the 1st & and perhaps by the third exacerbation of the fever = and when used let a decided impression be made. more blood can be taken at the 1st than 2d exacerbation and at the 2 than 3d by a decided impression = I mean that the abstraction should be in such amount as to relieve at the time the great pain in the head = a symptom by which one can best regulate the practice.

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if, however, instead of using the lancet thus, the Practitioner bleeds during the remission, I have very little doubt — that in some cases even death might be the consequence — and in all evident injury.

Cold water

How far the practice of cold affusion or aspersion may be proper in fever of local determination (or to use a language I hardly comprehend) a fever which is not Idiopathic — is a question which has been agitated — Believing as I do that there exists no such thing as an Idiopathic fever, but that all have local determination or commencement: I have only to satisfy myself that there exists nothing in the peculiar nature of bilious fever, which would render the application of cold to the surface decidedly improper — to conclude — that as the practice has unquestionably been successful in other fever it may be so in this — Now by the doctrine of cutaneo Hepatic sympathy (as promulg'd also by

Johnson

Johnson) and to which I give my most hearty consent. it is proved that any agent acting on the skin produces a similar or synchronous effect upon the capillaries of the liver. and as we are aware that the effects of cold aspersion during the accession of fever, is to ameliorate the condition of the skin by abstracting morbid heat — relaxing the constricted capillaries — and then by inducing a diaphoresis — I conclude that a similar effect will be produced upon the liver — congestion will be relieved, a more healthy secretion of bile will follow of course — and its ultimate effect might even be a solution of the fever. I should therefore not hesitate to use the cold aspersion — a remedy, I am convinced, too seldom directed in this country.

Mercury

Calomel is decidedly to the southern practitioner what Meade said of opium the "Magnum Dei donum"!

but like most of the great benefits conferred on mankind, it has been abused; on this account alone I have thought proper to make some remark upon it in this place ——— Its peculiar action on the glandular system, and especially the liver, its singular property of moderating the inflamatory diatheses, = renders it the appropriate remedy for many of the diseases of warm climate, — and above all for the fever under consideration; in fact, there is not in the whole range of the Materia Medica a remedy that can be substituted for it —— Let it not then ~~alone~~ lose the confidence of mankind (the learned Physician will always honour its value) by the abominable abuses, which have occurred in its use. When I hear of table = spoon = full doses of calomel, being given = I have little hesitation in saying = that the patient is treated by one either ignorant or by an experimentalist. barbarously inhuman, who deserves the reprehension

of every medical man who regards the honor of his profession.

Nitro-muriatic acid bath

I am led to believe from Dr. Lewis's account of the Nitro-muriatic acid bath - that it would prove a powerful adjunct in the cure of bilious fevers - used especially in those cases where mercury cannot be urged - its action on the system is much like the last mentioned medicine. and we are told by Dr. Chapman[1] that the internal exhibition of it along with the bath has been resorted to by him, exactly in those cases where mercury was indicated, but which from peculiar circumstances could not be given - and always with decided advantage.

"The Nitro muriatic acid bath (says Dr. Lewis) "appears in a particular manner, to affect the "glands - and to alter their secretions, and in this "owes a great part of its value, in derangements of

[1] See his Therapeutics -

"of the liver seems to depend, it increases the perspiration and offen to great extent." it is said also by sympathetic action on the bowels to induce catharsis = if such indeed are its properties, it surely has not met with sufficient attention.

Opium

The great discrepancy of opinion upon the use of opium, has left me, I confess, in a state of some indecision; I am rather inclined to believe, however, that in conjunction with the Tartras Antimonii & Calomel = it frequently produces diaphoresis = without increasing the distressing pain in the head = so constant a symptom in bilious fever; but when given alone as an anodyne in the first stage - I should rather apprehend evil than beneficial results; and if any artificial means, other than a quiet and dark room, is necessary to procure sleep: I should prefer any of the other articles, of the same class = such as

Conium

Conium, Hyoscyamus = Hyp picra - Hoffmans anodyne &c than opium.

In the second stage = it answers better as an anodyne = & is sometimes imperatively demanded - taking good care at all times to obviate any costiveness that might supervene on its use by laxatives = as an excitant - joined with wine. vol. alkalis &c. medical opinion is too decidedly in its favour for me positively to deny it merit. at the same time I am inclined to believe = that its effects are rather to place the living solids in such a state as to render them less sensible to the action of the vital fluids = and thus enable the wine vol alkalis &c: with which it is ~~conjoined~~ joined, to produce their roborant effects. he, however, who like myself ~~formed~~ his opinion of a medical subject = from books = rather than by a careful observation of the modus operandi of a medicine at the bed-side will be liable to errors of judgement which he will candidly

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acknowledge if they prove unsound in application.

Bark.

Bark, the specific remedy of intermittents, I apprehend so useful as a preventative to relapses in this form of fever;— the gastric irritability so constant an attendant on bilious fever, renders it almost impossible for the patient to retain any preparation of the article in his stomach, and when retained, it induces during convalescence a febricula, calculated rather to retard than hasten recovery. I would therefore substitute in its place the Colombo = the preparations of iron and the mineral acids. of the last, muriatic acid is to be preferred, = on account of its particular action on the liver.

Having thus offered my opinion upon the principal articles used in the cure of bilious fever I conclude the subject, by a short summary of the practice I consider the most advisable in the treatment

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this distressing complaint.

If called to the patient either on the 1st 2d or 3d day - use the lancet at the height of the exacerbation, unless a decided improvement is made, how far it may be proper to repeat it = must be left to the judgement of the practitioner = if the fever is Epidemic, the nature of the prevailing symptoms must be his guide, if no epidemic irregularities alter the nature of the fever & the first bleeding has not produced the effects anticipated = bleed again = if the pain in the head still continues violent, resort to topical bleeding with leeches or cupping & apply cold water or Ice water to the head = with cold affusion = if the heat of the surface is above the natural standard. If vomiting is present, assist nature in the first, place by copious draughts of warm water or chamomile tea, & then use acid drinks = the effervescent draught = or any appropriate remedy —

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remedy to quiet gastric irritability = Calomel will sometimes produce this desirable effect when all other means fail - at the first in conjunction with the bleeding = let calomel be used as a purge, in large doses followed by Jalap or the Sulph: Soda or Mag: let the quantity of medicine given be such as to produce copious catharsis & then resort to calomel in combination with tartras antimonii, and if the practitioner think, prepare with a small portion of opium = for the purpose of producing a specific action on the liver & skin = if, however, danger is apprehended from the first after having premised bleeding = place your dependence on the calomel so used as to produce its specific effect. it will seldom be found in any case of this fever, however afraid = that it will not yield to mercury thus employed. # If after all, a resolution of the fever does not take place = you are to be guided in the second stage in the use of -

[illegible] how to be used -

of the stimulants by the state of the symptoms. If coma exists = shave and blister the head = cold cloth however wile, often the head has been shaved, some times procures relief = sleep must now be obtained by opium. & at the same time that you use the Sol. Alk: vin &c &c. do not neglect to open the bowels by cathartics - use at this period the warm pediluvium of nitro muriatic acid = & now watching every symptom that arises = aim your endeavours to remove or neutralize it - for every inch the disease now obtains the practitioner looses an ell; nature yeilded when the disease changed from the first to the second stage. & the battle is now emphatically between death & the Doctor. & it must be fought with obstinate pertinacity, and if we must yeild let it be by inches = In conclusion = should the Doctor prove victorious, his remaining care is to prevent relapse, for which purpose = he is to direct a properly regulated diet -

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diet - consisting of such articles as are easy of digestion at the same time that they are non nutritious in small bulk = with the due administration of tonics - as - Colombo - the preparations of Iron, the mineral acids - &c. ~~with~~ a due regular exercise = carefully commenced & properly persevered in till perfect recovery ensues.

After having perused the pages of my essay I have set down to apologize for its imperfection = but why should I do so? ——
"Invenisarcum flectere tentat Ulysses"
and if I have failed = I am well assured that those who will have the kindness of my auditors will not expect perfection from a Tyro! I offer it, therefore, with all its imperfections "on its head" merely as a sort of prima facie evidence of some attention to my studies, and if it is accepted as such, I have gained all I could propose to myself in its composition.

Having neglected to advert to the use of blisters in the body of my Thesis — & as a proper attention to the Lectures, now requires all my time exclusively leaving me none to devote to the dressing of copying I beg leave in this place to offer my opinion in regard to their proper use.

The indiscriminate application of blisters in every stage of fever, is a most reprehensible practice = in the first stage they but add fuel to a fire, which already burns to the extinguishment of life — if in the last stage = I fear if they do no harm they do no good; the proper point of application is confessedly just on the turn of the fever when by keeping up the excitability of the extremities & surface we prevent congestion of the vital organs: Doct. Rush has stated in one of his essays (I do not at this time remember which) that

the

time for applying blisters is within the range of forty hours, when the violent reaction begins to subside & before prostration has occurred.

When thus used blisters rank among our most efficient remedies in Fever.